

Environment and Natural Resources Trust Fund

2022 Request for Proposal

General Information

Proposal ID: 2022-160

Proposal Title: LCCMR Stories: Sharing Minnesota's Biggest Environmental Investment

Project Manager Information

Name: Joy Hobbs

Organization: Science Museum of Minnesota

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Email: jramstack@smm.org

Project Basic Information

Project Summary: The Science Museum of Minnesota will relay the results of LCCMR-funded research to public audiences; dissemination will include a free online interactive map, in-depth videos, and public events.

Funds Requested: \$604,000

Proposed Project Completion: June 30 2025

LCCMR Funding Category: Environmental Education (C)

Project Location

What is the best scale for describing where your work will take place?

Statewide

What is the best scale to describe the area impacted by your work?

Statewide

When will the work impact occur?

During the Project and In the Future

Narrative

Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.

According to the LCCMR website, "since 1963, approximately \$1.0 billion has been appropriated to more than 2,300 projects recommended to the legislature by the Commission to protect and enhance Minnesota's environment and natural resources." Although project summaries and final reports are available online, the extensive body of work that the Commission has funded for more than 50 years remains largely unknown to most citizens of Minnesota. LCCMR has been instrumental in conserving, protecting, and enhancing MN's resources by funding projects ranging from research to the creation of trails. Minnesotans are proud of their natural resources, yet most are largely unaware of the enormous environmental investment that LCCMR has made. The general public lacks a way to engage with these projects, and most of the stories from this vast body of work remain untold. We believe that a small investment in dissemination to a public audience would provide LCCMR with an even greater return on the investment they've made and help achieve their goal of building a long-lasting and action-based conservation ethic in the state.

What is your proposed solution to the problem or opportunity discussed above? i.e. What are you seeking funding to do? You will be asked to expand on this in Activities and Milestones.

We are proposing to use The Science Museum of Minnesota's (SMM) expertise in communicating science to public audiences to tell the stories of LCCMR-funded research. The goal is to make LCCMR projects accessible to citizens across the state, and beyond. We will select projects from each of Minnesota's Ecoregions, and gather input from past and present LCCMR commissioners, to ensure a broad representation of projects. Our product development and dissemination will include the following: 1) Online Map - We will create a free, online interactive map (story map), which will contain 100 stories of LCCMR projects told through a summary of interesting findings, photos, and short video clips. 2) Exhibits - The story map will be made available on a large touchscreen in the SMM gallery. 3) Short Films - In-depth films will be produced for a subset of projects; they will be included on the story map, and will be available for use in formal and informal learning environments. 4) Events - We will use SMM's breadth of scientific programming for additional dissemination; programs and facilities include Coffee with a Curator, News from the Field, the Omni theater, as well as dissemination through social media.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

This work will instill citizens with a sense of pride in Minnesota's natural resources and LCCMR's environmental investment. We will showcase the impact that taxpayer money has had, and we will leave public audiences with an appreciation for the integral role that LCCMR has played in conserving, protecting, and enhancing MN's resources. We will ask project PIs to suggest ways that the public could engage with their work, and we will weave those suggestions into the story map. This call to action will encourage citizens to do their part to protect and enhance Minnesota's natural resources.

Activities and Milestones

Activity 1: Online story map: this interactive map will feature the results of 100 LCCMR stories, spanning all of Minnesota's ecoregions

Activity Budget: \$269,463

Activity Description:

The searchable, interactive story map will teach public audiences what we have learned about Minnesota's natural resources over the years. It will allow users to zoom in on a particular region, or sort by keyword, to quickly learn about projects of interest. This product will be available for free on the SMM website and available to SMM visitors as a touchscreen on the exhibit floor. We will disseminate the results of at least 100 LCCMR projects on the story map, and a range of project categories will be covered. To ensure broad geographic distribution, we will select at least 10 projects from each of Minnesota's eight Ecoregions (seven natural Ecoregions, plus the Twin Cities metro). Project selection will rely heavily on SMM's expertise in telling stories to a public audience; we will also seek suggestions from current and former LCCMR committee members. We will reach out to project Pls to learn about their findings, and then program this information for a public audience. Users of the story map will learn findings from the projects, view photos and short video clips, learn what LCCMR is, and where project funding comes from.

Activity Milestones:

Description	Completion Date
Creation of the story map, and addition of the first 50 projects.	June 30 2024
Select projects and reach out to researchers.	December 31 2024
Addition of the remaining 50 projects to the story map.	June 30 2025

Activity 2: Short films: Spotlight Films and Ecoregion Films will be available on the story map and disseminated through SMM programming.

Activity Budget: \$334,537

Activity Description:

In addition to the 100 stories, we will select a subset of projects that we will cover in greater detail. We will create 16 Spotlight films (two from each Ecoregion; each approximately five minutes in length). For each of these Spotlight films, our film crew will travel to the LCCMR project PI to interview them and learn more about their project, the results, and the impact that LCCMR has had on their work. In addition, a separate overview film will be created for each of the eight Ecoregions. These Ecoregion films will use weave together pieces of the Spotlight films and 100 stories to showcase LCCMR work in each Ecoregion. Spotlight and Ecoregion films will be added to the story map created in Activity 1; however, they can also serve as a stand-alone product. This will allow for many avenues of dissemination, including playing before Omni Films at SMM, in SMM's News from the Field exhibit, use in SMM's STEM Education programming, SMM's social media platforms, and SMM special events (such as Coffee with a Curator). The films will also be available for use by LCCMR, researchers, and educators.

Activity Milestones:

Description	Completion Date
Selection of projects, filming, and editing of the first half of the Spotlight films.	December 31 2023
Selection of projects, filming, and editing of the second half of the Spotlight films.	December 31 2024
Create overview Ecoregion Films using work from the Spotlight Films and 100 stories.	June 30 2025
Dissemination through SMM programs and exhibits, such as News from the Field.	June 30 2025

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Bette Schmit	Science Museum of Minnesota	Oversee story map project management; manage exhibit experience	Yes
Adam Heathcote	Science Museum of Minnesota	Assist with Project Selection; Scientific Content Advisor for Story Map and Films	Yes
Stephanie Long	Science Museum of Minnesota	Direct and Produce Spotlight Videos and Ecoregion Stories; Assist in Project Selection	Yes
Annie Moua	Science Museum of Minnesota	Film and Edit Spotlight Videos and Ecoregion Stories; Assist in Project Selection	Yes
Laurie Fink	Science Museum of Minnesota	General oversight and advising	No

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this be funded?

All content will be created and disseminated during the course of the project. One of the strengths of this project is that video content will live on after the project ending date. We will host all video content on YouTube, Vimeo, or a similar platform, making it easily accessible and available to anyone who wishes to incorporate into their own platform, or use in informal or formal educational programming.

Project Manager and Organization Qualifications

Project Manager Name: Joy Hobbs

Job Title: Associate Scientist

Provide description of the project manager's qualifications to manage the proposed project.

Joy Ramstack Hobbs is an Associate Scientist with the Science Museum of Minnesota's St. Croix Watershed Research Station (SCWRS), where she has worked for the past 15 years. The projects she has managed have ranged in scope from pure research to education and outreach, providing her with the necessary breadth of experience to lead this project and interact with LCCMR researchers. She is currently a PI on a large multi-institutional National Science Foundation grant to make SCWRS datasets available online for the purpose of global change research (Collaborative Research: Neotoma Paleoecology Database, a Multi-Proxy, International, Community-Curated Data Resource for Global Change Research); this involves coordination and collaboration with scientists at the SCWRS, and PIs across the country. Joy has worked extensively with the National Park Service in the Great Lakes region, on both research in the parks and educational initiatives. She also leads research projects on Minnesota lakes, most recently she's received a third round of funding to conduct work in the Comfort Lake Forest Lake Watershed District. She conceptualized, secured funding for, and co-directed the SCWRS's STARS internship program for high school and college students, with a particular focus on working with students from underrepresented communities. This range of experience makes her well qualified to lead a team of scientists, exhibits and communications professionals at SMM, and leaves her well-poised to coordinate and collaborate with LCCMR researchers from a broad range of disciplines.

Organization: Science Museum of Minnesota

Organization Description:

The Science Museum of Minnesota, founded in 1907, is located in downtown St. Paul. The museum's programs combine research and collection facilities, a public science education center, extensive teacher education and school outreach programs, and an Imax Convertible Dome Omnitheater to provide science education to our regional and national audience of more than a million people per year.

The museum's 70,000 square feet of exhibition space includes a 10,000-square-foot temporary exhibit gallery and five permanent galleries covering the topics of paleontology, physical science and technology, the human body, peoples and cultures of the Mississippi River, and the museum's collections. The Science Museum of Minnesota employs over 200 full and part time staff and is supported by more than 1,000 dedicated volunteers.

The museum is known for its in-house interactive exhibits, traveling exhibitions, and internationally distributed films. The museum was an early innovator in the use of live theater as an interpretive tool and continues to be a training ground for other museums wishing to include live programming. The museum provides innovative staff development programs for teachers throughout the region and science education outreach programs for students in all 87 of Minnesota's counties.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineli gible	% Bene fits	# FTE	Class ified Staff?	\$ Amount
Personnel								
Joy Hobbs, Project Manager, Associate Scientist SMM		Project Manager; Will provide general project management, and will oversee project selection as well as science content for story map, Spotlight, and Ecoregion videos			36.1%	0.75		\$75,091
Bette Schmit, Director of Experience Development, SMM		Oversee story map project management			43.7%	0.09		\$8,344
Adam Heathcote, Senior Scientist, SMM		Assist with project selection, scientific content advisor for story map and films			43.7%	0.3		\$31,980
Stephanie Long, Science Live Program Director, SMM		Direct and produce spotlight videos and regional stories for website and in-museum use			43.7%	0.69		\$62,842
Annie Moua, Media Developer, SMM		Film and edit spotlight videos and regional stories for website and in-museum use			43.7%	1.2		\$99,840
Aleah Vinick, Mission Advancement Events Specialist, SMM		Host LCCMR researchers and disseminate results through SMM's Coffee with a Curator event; 8 online events			43.7%	0.09		\$6,528
SMM Experience Developer		Copy writing, editing, proofing, project support for website content and exhibit experiences			43.7%	0.6		\$44,794

SMM Graphic		Design website graphic interface and brand		43.7%	0.3		\$21,840
Designer		elements, and display graphics for in-museum					
		experiences					
SMM Exhibit		Oversee timeline and budget, maintain museum		43.7%	0.2		\$19,851
Production		standards in design, production and installation of					
Manager		exhibit components (Story Map Kiosk & News from					
		the Field interactive)					
SMM		Test, build, install, and troubleshoot initial		43.7%	0.9		\$67,149
Exhibition		operations of interactive exhibit components (Story					
Fabricators		Map Kiosk & News from the Field interactive)					
SMM PR and		Produce marketing and PR materials and social		43.7%	0.1		\$7,250
Marketing		media coverage of Story Map during production,					
Staff		installation and operations					
SMM Story		Website design and programming, content		43.7%	1.2		\$87,000
Map Media		population, troubleshooting					
Developer							4
						Sub	\$532,509
						Total	
Contracts							
and Services							4
TBD	Professional	Translation services for the 100 stories on the story			0.1		\$5,000
	or Technical	map.					
	Service						
	Contract						4
						Sub	\$5,000
Farriage and						Total	
Equipment, Tools, and							
Supplies							
Supplies	Tools and	Media Kits (16 @ \$78 each)	Will be sent to a subset of researchers				\$1,248
	Supplies	Wedia Kits (10 @ \$78 each)	highlighted in the 100 stories so they				\$1,240
	Supplies		can send us video clips				
	Equipment	Video Camera - Sony A7R Mark IV with 29 – 77mm &	Will be used to film in-depth Spotlight	Х		 	\$2,996
	Equipment	24-105 mm lenses	and Ecoregion Videos	^			72,330
	Equipment	AV equipment for filming	Need for filming the Spotlight and	Х			\$2,481
	Equipment	Av equipment for minning	Ecoregion videos	^			72,401
	Tools and	Fabrication and graphic production materials	Needed for the story map kiosk at	Х			\$17,250
	Supplies		SMM and to incorporate LCCMR				
	• •		stories into the News from the Field				
			exhibit (all items under \$5,000)				

	Equipment	Electronic Equipment for SMM Exhibit Components	Needed for the story map kiosk at SMM and to incorporate LCCMR stories into the News from the Field exhibit (all items under \$5,000)	X		\$18,000
					Sub Total	\$41,975
Capital Expenditures						
					Sub Total	
Acquisitions and Stewardship						
_					Sub Total	-
Travel In Minnesota						
	Miles/ Meals/ Lodging	19 trips, 3 people per trip, one overnight stay per trip, mileage at \$0.55 per mile (number of miles estimated, exact destinations unknown until projects are selected)	Travel to researchers to film in-depth Spotlight and Ecoregion videos. One trip per Spotlight video (16 trips), 3 trips for Ecoregion videos (2-3 regions per trip)			\$15,516
					Sub Total	\$15,516
Travel Outside Minnesota						
					Sub Total	-
Printing and Publication						
					Sub Total	-
Other Expenses						
		Honorariums (18 x \$500)	Honorariums will be offered to the 16 researchers in the Spotlight films for their time; two honorariums will be given to project advisors			\$9,000
					Sub Total	\$9,000

				Grand	\$604,000
				Total	

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Equipment, Tools, and Supplies		Video Camera - Sony A7R Mark IV with 29 – 77mm & 24-105 mm lenses	This camera will be necessary to film the professional quality Spotlight and Ecoregion videos. This purchase is necessary because it will frequently be needed to travel to sites around the state for filming.
Equipment, Tools, and Supplies		AV equipment for filming	This equipment will be necessary to film the professional quality Spotlight and Ecoregion videos. This purchase is necessary because the equipment will frequently be needed to travel to sites around the state for filming.
Equipment, Tools, and Supplies		Fabrication and graphic production materials	This includes AV equipment which will be necessary to bring the LCCMR stories and videos to a public audience at SMM.
Equipment, Tools, and Supplies		Electronic Equipment for SMM Exhibit Components	This includes AV equipment which will be necessary to bring the LCCMR stories and videos to a public audience at SMM.

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub	•
			Total	
Non-State				
In-Kind	All indirect project costs are provide in-kind by the Science Museum of Minnesota (federal indirect rate 40.09% on all direct costs = \$242,143)	In-kind contribution of indirects	Pending	\$242,143
			Non State Sub Total	\$242,143
			Funds Total	\$242,143

Attachments

Required Attachments

Visual Component

File: 5e665f92-44e.pdf

Alternate Text for Visual Component

Title: LCCMR Stories: Sharing Minnesota's Biggest Environmental Investment

Summary of the project: Bringing the stories of LCCMR-funded projects to a public audience across Minnesota 1) Events - Online live public events, 2) LCCMR Stories - Free, online interactive map-based stories from each of MN's Ecoregions, 3) Exhibits and Omni Theater - SMM gallery experiences and Omni Theater presentations, and 4) Shared Content - Free videos for formal and informal learning settings....

Optional Attachments

Support Letter or Other

Title	File
Letter of Support from SMM President and CEO Alison Brown	9864addc-c53.pdf

Administrative Use

Does your project include restoration or acquisition of land rights?

No

Does your project have potential for royalties, copyrights, patents, or sale of products and assets?

Nc

Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?

N/A

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?

N/A

Does your project include original, hypothesis-driven research?

No

Does the organization have a fiscal agent for this project?

No

LCCMR Stories: Sharing Minnesota's Biggest Environmental Investment

Bringing the stories of LCCMR-funded projects to a public audience across Minnesota



Events
Online live public
events highlighting
LCCMR stories

LCCMR Stories

Free, online interactive map-based stories from each of MN's Ecoregions





Exhibits and Omni Theater LCCMR Stories incorporated into SMM gallery experiences and Omni Theater presentations

Shared Content
Free videos for
formal and
informal learning
settings



